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| APPLICATION NO.                  | FILING DATE                               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|----------------------------------|---|----------------------|---------------------|------------------|--|
| 10/610,493                       | 06/30/2003                                | Robert K. Hughes JR. | MS1-1444US          | 5381             |  |
| 22801<br>1 FF & HAVE             | 22801 7590 09/27/2007<br>LEE & HAYES PLLC |                      |                     | EXAMINER .       |  |
| 421 W RIVERSIDE AVENUE SUITE 500 |   |                      | ZHAO, DAQUAN        |                  |  |
| SPOKANE, WA 99201                |   |                      | ART UNIT            | PAPER NUMBER     |  |
|                                  |   |                      | 2621                |                  |  |
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|                                  |   |                      | 09/27/2007          | PAPER            |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.   | Applicant(s)   |  |  |  |
|---|---|--|--|--|--|
|   |   |  |  |  |  |
| Office Action Summary   | 10/610,493  | HUGHES, ROBERT K.  |  |  |  |
| omoo nodon dammary  | Examiner  | Art Unit   |  |  |  |
| The MAILING DATE of this communication app  | Daquan Zhao   | 2621   |  |  |  |
| Period for Reply  | ears on the cover sheet with the c  | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).   | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status  |   |  |  |  |  |
| 1) Responsive to communication(s) filed on <u>16 July 2007</u> .  |   |  |  |  |  |
| ,   | This action is FINAL. 2b)⊠ This action is non-final.  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |
| 4) ⊠ Claim(s) 1-42 is/are pending in the application. 4a) Of the above claim(s) 25 and 29-32 is/are w 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-24,26-28,33-42 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or   | vithdrawn from consideration.   | e e  |  |  |  |
| Application Papers  |   |  |  |  |  |
| <ul> <li>9) The specification is objected to by the Examine</li> <li>10) The drawing(s) filed on 30 June 2003 is/are: a)</li> <li>Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct</li> <li>11) The oath or declaration is objected to by the Ex</li> </ul>   | ☑ accepted or b)☐ objected to drawing(s) be held in abeyance. See ion is required if the drawing(s) is objected to  | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                       |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some color None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 9/10/2004.   | 4) Interview Summary Paper No(s)/Mail D  5) Notice of Informal F  6) Other:   | ate  |  |  |  |

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#### DETAILED ACTION

#### Election/Restrictions

1. Claims 25,29-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected groups II and III, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/16/2007.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. Sec. 101. Certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multimedia material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. Sec. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

Claim 39 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claim 39 recites a data structure, which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive

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material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1, 3, 9, 10, 11, 13, 14, 17, 23, 24, 26, 27, 28, 33, 39, 40, and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanda (US 6,324,335 B1).

In regards to claim 1, Kanda teaches a method comprising: identifying multimedia elements having a linear time-code number (e.g. figure 8, index No. for the in-point and out-point corresponds to "identifying", column 19, lines 50-58, wherein the in-point time code data corresponds to the "linear time-code"); adding a prefix value to linear time-code numbers of each identified multimedia element (e.g. column 18, line 66- column 19, line 22, and figure 8, Title, which is arrange before the in-point time-code data, corresponds to the prefix value, wherein the title value has 16 bytes); and adding suffix values to the linear time-code numbers of each identified multimedia element (e.g.

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the symbol type and symbol time-code data has 2 and 4 bytes, respectively, corresponds to the suffix values ).

In regards to claim 33, Kanda teaches a multimedia device comprising: a processor; a multimedia storage module executable on the processor and configured to store multimedia presentation content comprising of multimedia elements; and an extended time-code number module executable on the processor configured to append extended time-code numbers to multimedia element without a time-code number (e.g. column 28, lines 6-36).

In regards to claim 39, Kanda teaches a computer-readable medium having stored thereon a data-structure comprising: a first data field containing a title value; a second data field containing a time-code value; and a third data field containing a suffix value (e.g. figure 8).

In regards to claim 40, Kanda teaches a system comprising: a broadcast point providing multimedia elements (e.g. column 4, lines 6-14 and column 1, lines 4-8); and a multimedia device that receives the multimedia elements, wherein the multimedia device further receives extended time-code numbers associated with each multimedia element (e.g. column 26, lines 38-column 27, line 2 and figure 12, V1 and external time code).

In regards to claim 41, Kanda teaches the extended time-code numbers are provided by the broadcast point (e.g. column 4, lines 6-13, system 1 is a broadcast point).

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In regards to claim 9, Kanda teaches a broadcast point that performs the method of claim 1 (e.g. column 4, lines 6-14 and column 1, lines 4-8);

For claim 26, Kanda teaches a broadcast point that performs the method of claim 23 (e.g. column 4, lines 6-14 and column 1, lines 4-8);

In regards to claim 11, Kanda teaches identifying elements without a linear time-code number, and adding a linear time-code to the identified elements without a linear time-code (e.g. column 28, lines 6-15).

In regard to claim 3, Kanda teaches the prefix value comprises a title value (e.g. column 18, line 66- column 19, line 22, and figure 8, Title, which is arrange before the in-point time-code data, corresponds to the prefix value, wherein the title value has 16 bytes);

For claim 10, Kanda teaches a multimedia device that performs the method of claim 1 (e.g. figure 1, column 4, lines 6-14).

In regards to claim 13, Kanda teaches a method comprising: identifying a title value describing a particular multimedia presentation content comprised of multimedia elements described by extended time-code numbers (e.g. figure 8, index No. for the inpoint and out-point corresponds to "identifying", column 19, lines 50-58, wherein the inpoint time code data corresponds to the "linear time-code"); and searching for particular multimedia elements based on their extended time-code numbers (e.g. column 26, lines 39-62).

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In regards to claim 17, Kanda teaches the searching is performed based on a time map table that associates multimedia elements with extended time-code numbers (e.g. column 26, lines 39-62).

For claim 14, Kanda teaches the extended time-code numbers comprise a prefix and suffixes (e.g. column 18, line 66- column 19, line 22, and figure 8, Title, which is arrange before the in-point time-code data, corresponds to the prefix value, wherein the title value has 16 bytes; the symbol type and symbol time-code data has 2 and 4 bytes, respectively, corresponds to the suffix values).

Regarding claim 23, Kanda teaches a multimedia device that performs the method of claim 13 (e.g. figure 1).

Regarding claim 24, Kanda teaches a multimedia player that performs the method of claim 13 (e.g. figure 1).

Regarding claim 27, Kanda teaches a multimedia device that performs the method of claim 23 (e.g. figure 1).

Regarding claim 28, Kanda teaches a multimedia player that performs the method of claim 23 (e.g. figure 1).

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanda (US 6,324,335 B1) as applied to claims 1, 3, 9, 10, 11, 13, 14, 17, 23, 24, 26, 27, 28, 33, 39, 40, and 41 above, and further in view of Sturgeon et al (US 6,429,879 B1).

See the teaching of Kanda above.

For claims 4 and 16, Kanda fails to teach the suffix values comprise language value, angle value, and parental block value. Sturgeon et al teach the suffix values comprise language value, angle value, and parental block value (e.g. column 7, lines 1-27 and figure 5). It would have been obvious to one ordinary skill in the art at the time the invention was made to have incorporated the teaching of Sturgeon et al into the teaching of Kanda to increase effectiveness of parental management of content presentation (Sturgeon et al, column 4, lines 1-15).

7. Claims 2, 12, 34, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanda (US 6,324,335 B1) as applied to claims 1, 3, 9, 10, 11, 13, 14, 17, 23, 24, 26, 27, 28, 33, 39, 40, and 41 above, and further in view of the Prior Art section of the instant application.

See the teaching of Kanda above.

Regarding claims 2 and 12, Kanda fail to teach the multimedia elements comprise audio video elements and interspersed elements. The Prior Art section of the instant application teaches the multimedia elements comprise audio video elements and interspersed elements (e.g. figure 2 and page 6, lines 15-22). It would have been

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obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of the Prior Art section of the instant application into the teaching of Kanda to effectively management information from different sources.

Regarding claim 34, Kanda teaches a multimedia player module executable on the processor and configured to play the audio/video element (e.g. figure 1).

Regarding claim 35, Kanda teaches the multimedia player is configured to search for audio/video element based on extended time-code numbers (e.g. column 36, lines 45-62).

Regarding claim 36, Kanda teaches a multimedia player (e.g. figure 1).

8. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanda (US 6,324,335 B1) as applied to claims 1, 3, 9, 10, 11, 13, 14, 17, 23, 24, 26, 27, 28, 33, 39, 40, and 41 above.

See the teaching of Kanda above.

In regards to claim 5, Kanda teaches linear time-code numbers with prefix and suffix values are resident in a table that associates the multimedia elements to linear time-code numbers (e.g. figure 8). However, Kanda fails to specify the table of figure 8 is a time map table. Kanda also teach a time map table in column 26, lines 39-44. It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teaching of Kanda to also stored the prefix and suffix values of the linear time-code number in the time map table for the same reasons as taught in column

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32, lines 39-49 of Kanda, which is to specify reproduction speed for the specified event to use system resources efficiently since figure 8 of Kanda is used to specify an event of the video data (see column 17, lines 4-17).

Regarding claim 7, Kanda teach provides pointers to data structures in a medium (e.g. column 19, lines 22-27).

9. Claims 6, 8,18, 19, 20, 21,22, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanda (US 6,324,335 B1) as applied to claims 1, 3, 9, 10, 11, 13, 14, 17, 23, 24, 26, 27, 28, 33, 39, 40, and 41 above, and further in view of Saeki et al (US 6,078,727).

See the teaching of Kanda above.

For claim 6, Kanda fails to specify the time map is used by a DVD player to point to particular sectors on a DVD disc containing content representing the multimedia elements. Saeki et al teach the time map is used by a DVD player to point to particular sectors on a DVD disc containing content representing the multimedia elements (e.g. figures 8-9, column 9, lines 26-56). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Saeki et al into the teaching of Kanda to reduce the amount of optical disc reproduction information for storage efficiency (Saeki et al, column 2, lines 30-35).

For claims 8, 18 and 37, Saeki et al teach a DVD player that implements the method of claim 7, and wherein the medium is a DVD disc (e.g. figure 14).

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For claims 19 and 38, Saeki et al teach the multimedia device is a personal video recorder (e.g. figure 14).

For claim 20, Saeki et al teach the time map table is part of an information file that provides navigation and presentation information for titles in a medium (e.g. figure 8, the time map table is in the AV File management table, which is in the AV data management file, which is used for navigation and presentation).

For claim 21, Saeki et al teach a DVD player that implements the method of claim 20, and wherein the medium is a DVD disc (e.g. figure 14).

For claim 22, Saeki et al teach the multimedia device is a personal video recorder (e.g. figure 14).

10. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanda (US 6,324,335 B1) as applied to claims 1, 3, 9, 10, 11, 13, 14, 17, 23, 24, 26, 27, 28, 33, 39, 40, and 41 above, and further in view of Fujita et al (US 6,119,144).

See the teaching of Kanda above.

For claim 42, Kanda fails to teach the extended time-code numbers are provided by a web site. Fujita et al teach the extended time-code numbers are provided by a web site (e.g. column 4, lines 22-27). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Fujita et al into the teaching of Kanda to transfer only a necessary part of the data in transferring data from the video server to reduce the bandwidth and increase the transfer speed (Fujita et al, column 1, lines 44-47).

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11. Claim15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanda (US 6,324,335 B1) as applied to claims 1, 3, 9, 10, 11, 13, 14, 17, 23, 24, 26, 27, 28, 33, 39, 40, and 41 above, and further in view of Sullivan (US 2004/0,030,665 A1).

See the teaching of Kanda above.

For clam 15, Kanda fails to teach searching is performed based on the prefix and on one or more of the suffixes. Sullivan teaches searching is performed based on the prefix and on one or more of the suffixes (e.g. claim 25 of page 14). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Sullivan into the teaching of Kanda for high speed searching.

### Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nonomura et al (US 6,118,445); Kawamura et al (US 2001/0041055 A1).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daquan Zhao

Tran Thai Q Supervisory Patent Examiner